this load suspended from the davit it shall be operated from the full inboard to the full outboard position using the same operating crank or device used in actual practice aboard ship. The load shall then be swung in a fore and aft direction through an arc of approximately 10 degrees, each side of the vertical. The davit arm and frame shall show no permanent set or undue stress from this test. While this test is being conducted, the frame and arm, if of cast material, shall be subject to a test by being hammered to satisfy the inspector that the castings are sound and without flaws.

(3) A weight equal to 0.5 times the normal working load shall be suspended from the eye or end of the davit arm. This load shall be moved from the full inboard to the full outboard position using the actual handles supplied with the davit. The time required for this operation shall not exceed 90 seconds. The above test shall also be conducted with the davits set up to simulate a 15-degree inboard list with a 10-degree trim to determine that the davits may be satisfactorily operated in that condition. The above test shall also be conducted with the davits set up to simulate a 15-degree outboard list with a 10-degree trim. This test shall determine that the davit arms will not run out under the weight of the light boat.

(4) A load of 1.1 times the normal working load shall be moved from the full outboard to the full inboard position to demonstrate the strength of operation of the return mechanism.

(5) Gravity davits shall be tested for strength and operation at the place of manufacture in the presence of an inspector. The davit arms, tracks, frames, attachments, etc., shall be set up in a manner similar to an actual shipboard installation. This installation shall include a lifeboat winch suitable for gravity davits and the falls shall be reeved in the normal manner. The tests to be conducted are as noted in paragraphs (b)(6) to (8) of this paragraph.

(6) A weight equal to 1.1 times the working load shall be run from the full inboard to the full outboard position with the davit assembly in the normal upright condition. The davit arm, trackways, etc., shall show no permanent set or undue stress from this test.

(7) A weight equal to 2.2 times the working load shall be attached to the falls and suspended from the davit arm when in the full outboard position. The load shall be swung in a fore and aft direction through an arc of approximately 10 degrees each side of the vertical. The davit arm and trackways shall show no permanent set or undue stress from this test.

(8) The entire davit assembly shall then be heeled inboard 15 degrees and with a 10-degree trim. In this condition a weight equal to 0.5 times the working load shall be suspended from the falls and shall be operated from the full inboard to the full outboard position. This test shall demonstrate that the load is sufficient to turn out the davit by merely releasing the brake on the winch. Stops shall be made at intervals between the inboard and outboard positions to assure that the davit will start from any position.

(c) *Factory testing after approval.* (1) After the design of a mechanical davit has been approved, subsequent davits of the same design shall be individually tested as described in paragraph (b)(2) of this section.

(2) After the design of a gravity davit has been approved, subsequent davit arms of the same design shall be individually tested as described in paragraph (b)(7) of this section, except that the swing test may be eliminated if not practicable.

(d) *Name plate.* (1) A corrosion resistant name plate shall be affixed to each davit arm and frame on which shall be stamped the name of the manufacturer, approval number, type and serial number of the davit, maximum working load in pounds per arm together with the Marine Inspection Office identification letters, the date, and the letters ''U.S.C.G.''

[CGFR 49–18, 14 FR 5113, Aug. 17, 1949, as amended by CGFR 65–9, 30 FR 11467, Sept. 8, 1965; CGD 75–186, 41 FR 10437, Mar. 11, 1976]

§ 160.032–6 Procedure for approval of davits.

(a) Before action is taken on any design of davit, detailed plans covering fully the arrangement and construction of the davit together with stress

diagrams and calculations relative to the strength of the davit, and a complete bill of material setting forth the physical properties of all materials used shall be submitted to the Commandant through the Commander of the Coast Guard District having jurisdiction over the construction of the davit.

(b) If the drawings required in paragraph (a) of this section are satisfactory the Commander of the Coast Guard District in which the davits are to be built shall be notified in writing when fabrication is to commence. An inspector will be assigned to supervise the construction in accordance with the plans and upon completion conduct the tests required by § 160.032–5.

(c) At the time that the tests are successfully completed, the manufacturer shall present to the inspector four corrected copies of the plans noted in paragraph (a) of this section, including any corrections, changes, or additions which may have been found necessary during construction or testing. If the manufacturer desires more than one set of approved plans, additional copies shall be submitted at that time.

(d) Upon receipt of corrected drawings and satisfactory test report, the Commandant will issue a certificate of approval. No change shall be made in the design or construction without first receiving permission of the Commandant via the Commander of the Coast Guard District in which the davits are built.

[CGFR 49–18, 14 FR 5113, Aug. 17, 1949]

Subpart 160.033—Mechanical Disengaging Apparatus, Lifeboat, for Merchant Vessels

§ 160.033–1 Applicable specifications.

(a) *Specifications.* The following specifications of the issue in effect on the date mechanical disengaging apparatus is manufactured form a part of this subpart.

(1) Coast Guard specifications:

160.035, Specification for Lifeboats for Merchant Vessels.

(b) *Copies on file.* A copy of the specification regulations referred to in this section shall be kept on file by the manufacturer, together with the approved plans and certificate of approval. They shall be kept for a period consisting of the duration of approval and 6 months after termination of approval. The specification may be obtained from the Commandant (G–MSE), U.S. Coast Guard, Washington, DC 20593–0001.

[CGFR 49–18, 14 FR 5113, Aug. 17, 1949, as amended by CGFR 65–16, 30 FR 10899, Aug. 21, 1965; CGD 88–070, 53 FR 34535, Sept. 7, 1988; CGD 95–072, 60 FR 50467, Sept. 29, 1995; CGD 96–041, 61 FR 50733, Sept. 27, 1996]

§ 160.033–2 General requirements for mechanical disengaging apparatus.

(a) The requirements of this subpart apply to all new construction. Mechanical disengaging apparatus approved and in use prior to the regulations in this subpart may be continued in service if in satisfactory condition.

(b) Mechanical disengaging apparatus installed in approved lifeboats shall be designed to release both ends of the lifeboat simultaneously under tension.

(c) Other types of mechanical disengaging apparatus will be considered for lifeboats fitted on vessels operating on waters other than ocean, coastwise or Great Lakes, or for vessels of 3,000 gross tons and under operating in ocean, coastwise or Great Lakes service.

[CGFR 49–18, 14 FR 5113, Aug. 17, 1949, as amended by CGFR 60–36, 25 FR 10637, Nov. 5, 1960]

§ 160.033–3 Construction of mechanical disengaging apparatus.

(a) Mechanical disengaging apparatus shall be of such strength that the lifeboat in which installed may be safely lowered with its full complement of persons and equipment. A minimum factor of safety of six on the ultimate strength of the materials used shall be maintained at all times based on the approved working load per hook.

(b) Mechanical disengaging apparatus shall be designed to release both ends of the lifeboat simultaneously under tension, which shall be effected by partially rotating a shaft which shall be continuous and extend from point of contact with the hooks. The control effecting the rotation of the shaft shall be painted bright red and shall have